

**REMARKS**

This is in full and timely response to the Final Office Action mailed on February 13, 2004. Reexamination in light of the amendments and the following remarks is respectfully requested. Claims 22-28, 32-37, 41-48 and 50-52 are currently pending in this application, with claims 22, 32 and 41 being independent. No new matter has been added.

**Entry of amendment**

This amendment *prima facie* places the case in condition for allowance. Alternatively, it places this case in better condition for appeal. Accordingly, entry of this amendment is respectfully requested.

**Rejection under 35 U.S.C. §103**

Claims 22, 24-26, 32, 34-35, 41, 43-44 and 50-52 were rejected under 35 U.S.C. §103 as allegedly being obvious over U.S. Patent No. 5,376,561 to Vu et al. (Vu) in view of Japanese Publication No. 11-265155 (Toshiba).

Claims 23, 33 and 42 were rejected under 35 U.S.C. §103 as allegedly being obvious over Vu in view of Toshiba and U.S. Patent No. 6,049,106 to Forbes.

Claims 27, 36 and 45 were rejected under 35 U.S.C. §103 as allegedly being obvious over Vu in view of Toshiba and U.S. Patent No. 6,057,234 to Yamazaki.

Claims 28, 37, and 46 were rejected under 35 U.S.C. §103 as allegedly being obvious over Vu in view of Toshiba and U.S. Patent App. No. 2002/0164535 to Hoffend, Jr. et al. (Hoffend).

These rejections are traversed at least for the following reasons.

Claim amendment

While not conceding the propriety of these rejections, and in order to further the prosecution of the application, the features of claim 31 have been wholly incorporated into claim 22 to form amended claim 22, the features of claim 40 have been wholly incorporated into claim 32 to form amended claim 32, and the features of claim 49 have been wholly incorporated into claim 41 to form amended claim 41.

Since the features of claim 31 have been wholly incorporated into claim 22 to form amended claim 22, the features of claim 40 have been wholly incorporated into claim 32 to form amended claim 32, and the features of claim 49 have been wholly incorporated into claim 41 to form amended claim 41, *a new search and/or consideration is not required*. Accordingly, entry of this amendment is proper.

The feature of the adhesive layer being from the group comprising a polyimide, Teflon resin, silicon, germanium and metal is found within prior claims 31, 40 and 49. However, this feature is absent from within Vu, Toshiba, Forbes, Yamazaki, and Hoffend, either individually or as a whole.

Product-by-process generally

The Office Action contends that the claimed feature of an adhesive layer being dissolvable to remove the manufacturing substrate makes that feature a product-by-process feature.

In response to this contention, the Office Action attempts to recast selected structural features found within the claims as process steps. However, such a reconstruction is merely an

attempt to redefine the invention in a manner different than from what is set forth within the claims. Such reconstruction is without authority under Title 35 U.S.C., Title 37 C.F.R., the M.P.E.P. and relevant case law; such reconstruction is therefore deemed improper.

Moreover, a "product-by-process" claim is one in which the product is defined at least in part in terms of the method or process by which it is made. *Atlantic Thermoplastics Co. Inc. v. Faytex Corp.* 23 USPQ2d 1481, 1488 (Fed. Cir. 1992). However, the adhesive layer being dissolvable to remove the manufacturing substrate is not a process step, but instead, is physical characteristic of the adhesive layer. Physical characteristics are not process steps.

"All claim features must be considered." *Ex parte Petersen*, 228 USPQ 217, 218 (Bd. Pat. App. & Int. 1985). Exclusion of any claimed feature from consideration is also deemed improper. *In re Lowry*, 32 USPQ2d 1031 (Fed. Cir. 1994)(Board erred by denying patentable weight to data structure limitations). As a result, the mischaracterization of this feature of *the adhesive layer being dissolvable to remove the manufacturing substrate* as product-by-process feature, along with an exclusion of this feature from consideration, is improper.

Withdrawal of these rejections and allowance of the claims is respectfully requested.

Claims 31, 40 and 49 were rejected under 35 U.S.C. §103 as allegedly being obvious over Vu in view of Toshiba and U.S. Patent No. 6,458,613 to Bae.

This rejection is traversed at least for the following reasons.

While not conceding the propriety of these rejections, and in order to further the prosecution of the application, the features of claim 31 have been wholly incorporated into claim 22 to form amended claim 22, the features of claim 40 have been wholly incorporated into claim 32 to form amended claim 32, and the features of claim 49 have been wholly incorporated into claim 41 to form amended claim 41.

Claim 22 and the claims dependent thereon include the features of:

a product substrate and a thin film device,

wherein a manufacturing substrate is of an inorganic material,

wherein said product substrate is one of an organic material and a metal,

wherein said product substrate has a first side and a second side opposed to said first side,

wherein said manufacturing substrate is adjacent said first side, said manufacturing substrate being closer to said first side than to said second side,

wherein an adhesive layer is formed between said first side and said manufacturing substrate, said adhesive layer being from the group comprising a polyimide, Teflon resin, silicon, germanium and metal,

wherein said thin film device is adjacent said second side, said thin film device being closer to said second side than to said first side,

wherein said product substrate is between said thin film device and said manufacturing substrate, and

wherein said manufacturing substrate is removable for exposing said first side by leaving said product substrate and said thin film device.

Claim 32 and the claims dependent thereon include the features of:

a product substrate and a pixel array,

wherein a manufacturing substrate is of an inorganic material,

wherein said product substrate is one of an organic material and a metal,

wherein said product substrate has a first side and a second side opposed to said first side,

wherein said manufacturing substrate is adjacent said first side, said manufacturing substrate being closer to said first side than to said second side,

wherein an adhesive layer is formed between said first side and said manufacturing substrate, said adhesive layer being from the group comprising a polyimide, Teflon resin, silicon, germanium and metal,

wherein said pixel array is adjacent said second side, said pixel array being closer to said second side than to said first side,

wherein said product substrate is between said pixel array and said manufacturing substrate, and

wherein said manufacturing substrate is removable for exposing said first side by leaving said product substrate and said pixel array.

Claim 41 and the claims dependent thereon include the features of:

a product substrate and an electroluminescence device,

wherein a manufacturing substrate is of an inorganic material,

wherein said product substrate is one of an organic material and a metal,

wherein said product substrate has a first side and a second side opposed to said first side,

wherein said manufacturing substrate is adjacent said first side, said manufacturing substrate being closer to said first side than to said second side,

wherein said electroluminescence device is adjacent said second side, said electroluminescence device being closer to said second side than to said first side,

wherein an adhesive layer is formed between said first side and said manufacturing substrate, said adhesive layer being from the group comprising a polyimide, Teflon resin, silicon, germanium and metal,

wherein said product substrate is between said electroluminescence device and said manufacturing substrate, and

wherein said manufacturing substrate is removable for exposing said first side by leaving said product substrate and said electroluminescence device.

The Office Action cites element 34 of Vu for the adhesive found within the claims for the above-identified application. In this regard, Vu describes element 34 as an oxide layer such as SiO<sub>2</sub> (column 6, line 64). The Office Action admits that that Vu fails to disclose, teach or suggest element 34 as being an adhesive layer from the group comprising a polyimide, Teflon resin, silicon, germanium and metal, and cites Bae for the features deficient within Vu.

Bae arguably teaches a method for manufacturing a liquid crystal display using a selective etching method. The Office Action cites layer 23 of Bae for the adhesive found within the claims for the above-identified application.

Bae arguably teaches that layer 23 has good adhesive property with amorphous silicon (column 1, lines 62-65). However, please note that Bae identifies layer 23 as being  $\text{SiN}_x$  or  $\text{SiO}_x$  layer (column 1, lines 62-63). Further recall that Vu describes element 34 as an oxide layer such as  $\text{SiO}_2$  and that the Office Action admits oxide layer 34 of Vu as failing to disclose, teach or suggest an adhesive layer from the group comprising a polyimide, Teflon resin, silicon, germanium and metal. Likewise, Bae fails to disclose, teach or suggest layer 23 as being an adhesive layer from the group comprising a polyimide, Teflon resin, silicon, germanium and metal.

Toshiba fails to provide for the above-noted features deficient from within Vu and Bae.

Withdrawal of these rejections and allowance of the claims is respectfully requested.

#### **New non-final Office Action**

If the allowance of the claim is not forthcoming at the very least and a new grounds of rejection made, then a **new non-final Office Action** is respectfully requested.

#### **Conclusion**

For the foregoing reasons, all the claims now pending in the present application are allowable, and the present application is in condition for allowance. Accordingly, favorable reexamination and reconsideration of the application in light of the amendments and remarks is courteously solicited.

If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone Brian K. Dutton, Reg. No. 47,255, at 202-955-8753 or the undersigned attorney at the below-listed number.

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If any fee is required or any overpayment made, the Commissioner is hereby authorized to charge the fee or credit the overpayment to Deposit Account # 18-0013.

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Respectfully submitted,

By 

Ronald P. Kananen

Registration No.: 24,104

RADER, FISHMAN & GRAUER PLLC

1233 20th Street, N.W.

Suite 501

Washington, DC 20036

(202) 955-3750

Attorney for Applicant